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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/500,004	CHOI, HYUNG RACK	
	Examiner	Art Unit	
	XIANG YU	4127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☒ Claim(s) *1* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 June 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *19 August 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This is a non-final Office Action in response to the present US application number 10/500,004 filed on 06/23/2004 and IDS filed on 8/19/2004, where claims 1-9 are pending and have been examined.

Claim Objections

2. **Claims** are objected to because of the following informalities:

- As to **claim 1**, the limitation stating:

  "a first interface unit (31) requesting the server unit (10) to transmit the remote control data through the Internet 20 and receiving transmitted remote control data,"

  should be changed to:

  "a first interface unit (31) requesting the server unit (10) to transmit the remote control data through the Internet **(20)** and receiving transmitted remote control data,"

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-4, 6, 7, and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,218,243 B2 to *Hayes et al.* ("*Hayes*") in view of

U.S. Patent No. 6,539,358 B1 to *Coon et al. ("Coon")* and further in view of U.S. Patent Pub. 2004/0010472 A1 to *Hilby et al.* ("*Hilby*").

As to **claim 1**, *Hayes* discloses of a system for downloading remote control data using the Internet, comprising:

a server unit (10) having remote control data. In particular, *Hayes* further discloses of a database and associated server (column 1, lines 54-55);

a client Personal Computer (PC) (30) processing the remote control data. In particular, *Hayes* further discloses of an intermediate client device (302), such as a personal computer, set top box, etc (column 11, lines 45-47; Fig. 14-16);

a remote control code transmitting system (40). In particular, *Hayes* does not expressly disclose of a separate remote control code transmitting system. However, *Hayes* does disclose of a possible docking station that acts as an intermediate step between the client PC and the remote controller (Figs. 14 and 15).

Coon discloses more expressly of the remote control code transmitting system. In particular, *Coon* further discloses of a docking station capable of acting as a secondary remote storage device. In particular, *Coon* discloses upon docking the portable computing device (20) into the docking station (12) or upon activation of the system, the interface application (38) copies requestable data into a memory space residing on the docking station (12) (column 3, lines 1-4).

Hayes and *Coon* are analogous art because they are from the same field of endeavor with respect to using a docking station as a remote control code transmitting system.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Coon's* concept of the docking station into *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining would be such that the docking station would be used more efficiently by being able to act as a temporary secondary storage device (*Coon:* column 3, line 4) and at the same time, be able to transfer that stored data at a later time to the remote controller (*Hayes:* column 12, lines 50-53);

the Internet (20) connecting the server unit (10), the client PC (30) and the remote control code transmitting system (40) to each other. In particular, *Hayes* further discloses of all four units connected to each other in illustrations as depicted in Figures 14-17;

two remote controllers (50 and 50') connected to the system in wired and wireless manners, respectively. In particular, *Hayes* further discloses of both variations of the remote controller in the illustrations as depicted in Figures 14-17. Figure 14 depicts a wired remote controller, where the connection is made through the wired docking station. Figures 15-17 depicts various formations of a wireless remote controller;

wherein the server unit (10) comprises

a database server (11) having the remote control data for apparatuses to be remotely controlled and performing responses and data transmission with respect to various requests. In particular, *Hayes* further discloses of a centralized device database [which] may also store information relevant to the operations of devices (column 11, lines 30-32);

an authentication system (12) connected to the database server (11) to perform user authentication. In particular, *Hayes* does not expressly disclose about an authentication step within the configuration.

Hilby discloses more expressly of a user authentication function that is implemented between a server and a client. In particular, *Hilby* further discloses of how the host server verifies the provided information by comparing the information received from the user terminal to information from an accessed repository, such as government database information. If the information is verified, the host server generates a certification for the user, such as a Digital Certificate (paragraph [0046]).

Hayes and *Hilby* are analogous art because they are from the same field of endeavor with respect to authenticating a user through the Internet.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Hilby's* concept of the whole authentication and verification of the user information process within *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining them would be such that the universal remote controller would then be

able to set up the user authentication process (*Hilby:* paragraph [0046]) with each client device that it would be interacting with afterwards (*Hayes:* column 11, lines 20-29); and

a billing settlement system (13) connected to the database server (11) to update billing information of users. In particular, *Hayes* does not expressly disclose of in great detail about the billing settlement system.

Hilby does disclose more expressly of how an Internet user who does not have a credit or charge card, or who elects not to use such a card, selects an option to establish billing at a Web site. The Web site would request the user to provide personal identification information, with at least one form of government issued and verifiable data, such as a driver's license number, a voter registration number, or a social security number (paragraph [0035]). After all the user verification steps, the products and services ordered by that user may then be provided to the user and billed to the correct account, either through the user's home telephone number or through the user's credit card (paragraph [0021]).

Hayes and *Hilby* are analogous art because they are from the same field of endeavor with respect to billing a user through the Internet.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Hilby's* concept of a billing settlement system through the Internet with *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining would be such that having a billing system within the database server would be very useful when the

user can decide to use the universal remote controller to order products or services through the client PC device, a cable set top box, or some other means over Internet later on (*Hayes:* Figs. 16 and 17, column 14, lines 12-19; *Hilby:* paragraph [0021]);

a first interface unit (31) requesting the server unit (10) to transmit the remote control data through the Internet (20) and receiving transmitted remote control data. In particular, *Hayes* further discloses of an exemplary embodiment where the intermediate client device (302) is capable of communicating with and accessing the centralized device database server (300) via the Internet (column 11, lines 58-61). In addition, by way of example, the client device (302) can be a personal computer (Figs. 14 and 15);

a temporary storage space (32) temporarily storing the received remote controller data. In particular, *Hayes* further discloses wherein the data may be stored on the client device (302) for later transfer to the memory of the remote control (10) during a subsequent docking or communication session with the remote control (10) (column 12, lines 50-54);

a data analysis unit (33) determining a transmission method of the remote control data. In particular, *Hayes* further discloses of how the client device (302) can include software, preferably running in the background mode. This software can detect for new devices or function identities (column 12, line 13) within the network layout, and the new information would be transmitted over to the centralized database server. The transmitted information would include data

[representation] of the new device or the function identity (column 12, lines 18-19). In essence, learning of a new device would prompt the software and the system to recognize the device and know the transmission means of the device;

a second interface unit (34) transmitting the remote control data in a wired manner. In particular, *Hayes* further discloses in an exemplary embodiment of a docking device (304) as illustrated in Fig. 14 (column 12, line 2) which connects the intermediate client PC with the remote controller in a wired manner;

wherein the remote control code transmitting system (40) comprises

a third interface unit (41) receiving transmitting remote control data through the first interface unit (31). In particular, *Hayes* does not expressly disclose of the remote control code transmitting system in details, except for the concept of an intermediate docking station with limited capabilities.

Coon does disclose more expressly of the remote control code transmitting system being a docking station and having an interface unit for communicating through various ports with the client device. These ports include, but not limited to serial port, parallel port, universal serial bus port, etc. (column 4, lines 42-43).

Hayes and *Coon* are analogous art because they are in the same field of endeavor with respect to using a docking station to receive transmitted remote control data through various interface units.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Coon's* concept of the docking station into

Hayes' overall concept of setting up the universal remote controller. The suggestion/motivation for combining would be such that the docking station would be used more efficiently because of all the various ports that it can support, thus allowing for it to be able to interface with various units (*Coon:* column 4, lines 42-43);

a temporary storage space (42) temporarily storing the received data. In particular, *Hayes* does not expressly disclose of the remote control code transmitting system in details, except for the concept of an intermediate docking station with limited capabilities.

Coon does disclose more expressly of a docking station with memory space residing [within it] (column 3, line 4) and thus is able to temporarily store any received data from the client devices before transmitting it forward to another device.

Hayes and *Coon* are analogous art because they are in the same field of endeavor with respect to having a docking station act as a secondary storage medium.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Coon's* concept of the docking station with memory storage space into *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining would be such that the docking station could be used to act as a temporary storage space with its

added memory capabilities and thus eliminating the need for an additional remote secondary storage medium (*Coon:* column 3, line 4); and

a fourth interface unit (43) transmitting the stored remote control data to the remote controller (50') in a wireless manner. In particular, *Hayes* does not expressly disclose of the remote control code transmitting system in details, except for the concept of an intermediate docking station with limited capabilities.

Coon does disclose more expressly of a docking station capable of transmitting data in a wireless manner through the Internet (column 4, lines 45-50).

Hayes and *Coon* are analogous art because they are in the same field of endeavor with respect to using a docking station to transmitted stored remote control data to the client device through various interface ports, including a wireless manner.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Coon's* concept of the docking station into *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining would be such that the docking station would thus be more efficient being able to function in a wireless manner (*Coon:* column 4, lines 41-52);

wherein the remote controllers (50 and 50') each comprise

a terminal (51) connected to the client PC (30) in a wired manner to receive the remote control data, or transceiver unit (54) receiving the remote

control data from the remote control code transmitting system (40) in a wireless manner. In particular, *Hayes* further discloses of communications with the client (302) can be by means of a docking device (304), which is connected in a wired manner (Fig. 14; column 12, lines 1-2). In addition, a wireless manner is also disclosed as depicted in the illustrations of Figure 15;

a control unit (52) converting the transmitted data into data in a required manner. In particular, *Hayes* further discloses of having an adapter device that attaches to the digital bus interconnecting [various] appliances and which solicits capability information from appliances on the bus for transfer to the remote control (column 10, lines 3-6). The adapter can be either a "stand along" unit or incorporated within some other device (column 10, lines 15-17). In essence, the adapter collects all the capability information of the appliances that are connected and sends the information to the remote controller. For any appliance that is not compatible with the remote controller, additional identity information about the appliance is collected from the centralized device database later; and

a storage unit (53) storing the data converted by the control unit (52). In particular, *Hayes* further discloses of the remote controller being able to store the identity information within its memory (column 11, line 40).

As to **claim 2**, the rejection of claim 1 is incorporated and *Hayes* further discloses of a system wherein the second interface unit (34) of the client PC (30) is connected to the terminal (51) of the remote controller (50) with a universal

serial bus. In particular, *Hayes* further discloses of a docking device (304) which connects to the client PC (Fig. 14).

However, *Hayes* does not expressly disclose about the connection to the client PC being a universal serial bus connection.

Coon does expressly disclose about docking station and it may provide additional data ports (e.g., serial port, parallel port, universal serial bus port, etc.) for interfacing with other types of communication devices (column 4, lines 41-44).

Hayes and *Coon* are analogous art because they are from the same field of endeavor with respect to trying to utilize a docking station through a universal serial bus port.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Coon's* more detailed docking station with the universal serial bus (USB) port with *Hayes'* non-descriptive docking device in order to get more potential out of the docking station. The suggestion/motivation for combining would be to create an overall more efficient docking station with the capabilities to handle all kinds of interface ports (*Coon:* column 4, lines 41-52).

As to **claim 3**, the rejection of claim 1 is incorporated and *Hayes* further discloses of a system wherein the remote controller (50') is a mobile communications terminal having a remote control function. In particular, *Hayes* further discloses of an exemplary embodiment where the remote control is a PDA

or PDA-like device, as is possible in the examples shown in Fig. 14 or 15 (column 12, lines 24-26). A personal digital assistant would be considered as a mobile communications terminal or device.

As to **claim 4**, the rejection of claim 1 is incorporated and *Hayes* further discloses of a system wherein the remote controller (50') further comprises:

a first interface unit (31) requesting the server unit (10) to transmit remote control data and receiving transmitted remote control data. In particular, *Hayes* further discloses of the device identity information can be requested from the centralized device database for use in the remote control can be [obtained] during an on-line communications session (column 11, lines 48-52);

a temporary storage space (32) temporarily storing received remote control data. In particular, *Hayes* further discloses of how the information obtained from the centralized device database can be downloaded to the intermediate device (302) for subsequent, off-line downloading into the memory (34) of the remote control (10) (column 11, lines 52-54).

As to **claim 6**, the rejection of claim 5 is incorporated and *Hayes* further discloses of a method wherein the 6th and 7th steps are replaced by the following steps, if it is determined that the remote control data is transmitted in a wireless manner at the 5th step:

the 5-1st step of the client PC (50) requesting the server unit (35) to transmit the remote control data to the remote control code transmitting system (40) through the first interface unit (31). In particular, *Hayes* further discloses of the entire system with the client PC, the centralized device database, and the remote control code transmitting system being a docking station. However, the docking station here has limited capabilities and Hayes does not expressly disclose about it the wireless capabilities of this device.

Coon does disclose more expressly of the remote control code transmitting system being a docking station and having an interface unit for communicating through various ports with the client device. These ports include, but not limited to serial port, parallel port, universal serial bus port, etc. (column 4, lines 42-52).

Hayes and *Coon* are analogous art because they are in the same field of endeavor with respect to using a docking station to receive transmitted remote control data through various interface units.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Coon's* concept of the docking station into *Hayes'* overall configuration setup of transmitting the remote control data to the docking station, which can hold memory (column 3, line 4), from the centralized device database. The suggestion/motivation for combining them would be such that the docking station would be used more efficiently because of all the various

ports that it can support, thus allowing for it to be able to interface with various units (*Coon:* column 4, lines 42-43);

the 5-2nd step of the remote control code transmitting system (40) receiving the remote control data transmitted from the server unit (10) through the third interface unit (41). In particular, *Hayes* further discloses of a wireless configuration of devices, where the centralized device database can transmit data in a wireless manner to the remote controller as depicted in Figure 17. However, *Hayes* does not expressly disclose of the secondary remote control code transmitting system within that configuration.

Coon does disclose more expressly of the remote control code transmitting system being a docking station and being able to act as an intermediate storage device with its own internal memory space (column 3, line 4) and having various interface ports including a wireless capability to connect to the Internet (column 4, lines 41-52).

Hayes and *Coon* are analogous art because they are in the same field of endeavor with respect to using a docking station to receive transmitted remote control data through various interface units, including a wireless manner.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Coon's* concept of the docking station into *Hayes'* overall configuration setup of transmitting the remote control data to the docking station in a wireless manner from the centralized device database. The suggestion/motivation for combining would be such that the docking station

would thus be more efficient being able to function in a wireless manner (*Coon:* column 4, lines 41-52);

the 5-3rd step of the remote control code transmitting system (40) storing the transmitted remote control data in the temporary storage space (42). In particular, *Hayes* discloses of a docking device, which can act as the remote control code transmitting system with limited capabilities and does not expressly disclose about a memory storage capability within the docking device.

Coon does disclose more expressly of a docking station with memory space residing [within it] (column 3, line 4) and thus is able to temporarily store any received data from the client devices before transmitting it forward to another device.

Hayes and *Coon* are analogous art because they are in the same field of endeavor with respect to having a docking station act as a secondary storage medium.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Coon's* concept of the docking station with memory storage space into *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining would be such that the docking station could be used to act as a temporary storage space with its added memory capabilities and thus eliminating the need for an additional remote secondary storage medium (*Coon:* column 3, line 4); and

the 6-1st step of the remote control code transmitting system (40) transmitting the stored remote control data to the transceiver (54) of the remote controller (50') through the fourth interface unit (43) in a wireless manner. In particular, *Hayes* does not expressly disclose of the remote control code transmitting system in details, except for the concept of an intermediate docking station with limited capabilities, such as being able to transmit data only to the remote controller in a wired or docked manner.

Coon does disclose more expressly of a docking station capable of transmitting data in a wireless manner through the Internet (column 4, lines 45-50).

Hayes and *Coon* are analogous art because they are in the same field of endeavor with respect to using a docking station to transmitted stored remote control data to the client device through various interface ports, including a wireless manner.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Coon's* concept of the docking station into *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining would be such that the docking station would thus be more efficient being able to function in a wireless manner (*Coon:* column 4, lines 41-52);

As to **claim 7**, the rejection of claim 5 is incorporated and *Hayes* further discloses of a method wherein the 2nd step further comprises:

the 2-1st step of a database server (11) receiving authentication information from the client PC (30). In particular, *Hayes* does not expressly disclose about an authentication step within the configuration.

Hilby discloses more expressly of an authentication function that is implemented between a server and a client. In particular, *Hilby* further discloses of how information input to the user terminal (2) is transmitted via couplings (3), (4) and a network (5) (e.g., the Internet) to a host server (7) (Fig. 1, paragraph [0045])

Hayes and *Hilby* are analogous art because they are from the same field of endeavor with respect to authenticating a user through the Internet.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Hilby's* concept of the user authentication process within *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining would be such that the universal remote controller would be receiving a user authentication with each new client device that it would be controlling (*Hilby:* paragraph [0046]; *Hayes:* column 11, lines 20-29);

the 2-2nd step of the database server (11) transmitting the authentication information to the authentication system (12). In particular, *Hayes* does not expressly disclose about an authentication step within the configuration.

Hilby discloses more expressly of an authentication function that is implemented between a server and a client. In particular, *Hilby* further discloses of how the host server would verify the user information by accessing a third party repository (52), such as a database of government information, and comparing the received identity information to information in the repository (paragraph [0052]).

Hayes and *Hilby* are analogous art because they are from the same field of endeavor with respect to authenticating a user through the Internet.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Hilby's* concept of the whole user authentication and verification process within *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining would be such that in order to authenticate the user, there needs to be a backup or repository of data which can be accessed and used for verification (*Hilby:* paragraphs [0046] and [0052]).

the 2-3rd step of the authentication system (12) performing user authentication using the authentication information. In particular, *Hayes* does not expressly disclose about an authentication step within the configuration.

Hilby discloses more expressly of an authentication function that is implemented between a server and a client. In particular, *Hilby* further discloses of how the information from the database server is verified against the

information in the government database (e.g., social security information, driver's license information, or voter registration information) (paragraph [0046]).

Hayes and *Hilby* are analogous art because they are from the same field of endeavor with respect to authenticating a user through the Internet.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Hilby's* concept of verifying the information from the server into *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining would be such that the step of verifying the user authentication information could be done at each instance when the remote controller is introduced to a new device (*Hayes:* column 11, lines 20-29).

the 2-4th step of the authentication server (12) transmitting authentication results to the database server (11). In particular, *Hilby* further discloses that after verification of the user authentication from the repository database, the host server would generate a certification for the user, such as a Digital Certificate (paragraph [0046]).

Hayes and *Hilby* are analogous art because they are from the same field of endeavor with respect to authenticating a user through the Internet.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Hilby's* concept of verifying the user with the reference data from the repository and certifying the user with a Digital Certificate into *Hayes'* overall concept of the universal remote controller. The

suggestion/motivation for combining would be such that having the Digital Certificate would ensure the user is authenticated and certified without doubt within the whole system and then the database server can proceed further towards the next step/goal (*Hilby:* paragraph [0046]).

the 2-5th step of the database server (11) determining whether user authentication is successful based on the transmitted authentication results. In particular, *Hayes* does not expressly disclose about an authentication step within the configuration.

Hilby discloses more expressly of an authentication function that is implemented between a server and a client. In particular, *Hilby* further discloses of how the host server would generate a certification for the user, such as a Digital Certificate, if the information is verified successfully against the government database information (paragraph [0046]).

Hayes and *Hilby* are analogous art because they are from the same field of endeavor with respect to authenticating a user through the Internet.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Hilby's* concept of a successful verification notification along with *Hayes'* overall concept of the universal remote controller. The suggestion/motivation for combining would be such that having the authentication information successfully checked against the government database should result in a Digital Certificate showing the checked status (paragraph [0046]).

As to **claim 9**, it is the same system claim corresponding to system claim 4 and is rejected under the same reasons set forth in connection with the rejection of claim 4.

5. **Claims 5 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,218,243 B2 to *Hayes* in view of U.S. Patent No. 6,539,358 B1 to *Coon*.

As to **claim 5**, *Hayes* discloses of a method for downloading remote control data using the Internet, comprising:

the 1st step of a client PC (30) requesting remote control data, which is selected by a user to download, from a server unit (10) through a first interface unit (31). In particular, *Hayes* further discloses that upon receipt of the identity information from the remote control (10), the centralized device database server (300) uses the identity information to select from a command code library stored in centralized device database one or more command codes and transmission formats recognizable and appropriate for the identified device and/or function. This data is then returned from the centralized database server (300) to the client device (302) (column 12, lines 40-48).

the 2nd step of the client PC (30) undergoing user authentication in the server unit (10). In particular, *Hayes* does not expressly disclose about an authentication step within the configuration.

Hilby discloses more expressly of a user authentication function that is implemented between a server and a client. In particular, *Hilby* further discloses of how the host server verifies the provided information by comparing the information received from the user terminal to information from an accessed repository, such as government database information. If the information is verified, the host server generates a certification for the user, such as a Digital Certificate (paragraph [0046]).

Hayes and *Hilby* are analogous art because they are from the same field of endeavor with respect to authenticating a user through the Internet.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine *Hilby's* concept of the whole authentication and verification of the user information process within *Hayes'* overall concept of setting up the universal remote controller. The suggestion/motivation for combining them would be such that the universal remote controller would then be able to set up the user authentication process (*Hilby:* paragraph [0046]) with each client device that it would be interacting with afterwards (*Hayes:* column 11, lines 20-29);

the 3rd step of the client PC (30) receiving remote control data transmitted from the server unit (10) in response to the request through the first interface unit (31). In particular, *Hayes* further discloses of an exemplary embodiment where the intermediate client device (302) is capable of communicating with and accessing the centralized device database server (300) via the Internet (column

11, lines 58-61). In addition, by way of example, the client device (302) can be a personal computer (Figs. 14 and 15);

the 4th step of the client PC (30) temporarily storing the received remote control data in the temporary storage space (32). In particular, *Hayes* further discloses wherein the data may be stored on the client device (302) for later transfer to the memory of the remote control (10) during a subsequent docking or communication session with the remote control (10) (column 12, lines 50-54);

the 5th step of the client PC (30) determining whether the remote control data is transmitted in a wired or wireless manner through the use of a data analysis unit (33). In particular, *Hayes* further discloses of how the client device (302) can include software, preferably running in the background mode. This software can detect for new devices or function identities (column 12, line 13) within the network layout, and the new information would be transmitted over to the centralized database server. The transmitted information would include data [representation] of the new device or the function identity (column 12, lines18-19). In essence, learning of a new device would prompt the software and the system to recognize the device and know the transmission means of the device;

the 6th step of the client PC (30) transmitting the remote control data to a terminal (51) of the remote controller (50) through a second interface unit (34) if it is determined that the data is transmitted in a wired manner. In particular, *Hayes* further discloses in an exemplary embodiment of a docking device (304) as

illustrated in Fig. 14 (column 12, line 2) which connects the intermediate client PC with the remote controller in a wired manner;

the 7th step of the remote controller (50) receiving the remote control data from the terminal (51). In particular, *Hayes* further discloses where the remote control data may be stored on the client device (302) for later transfer to the memory of the remote control (10) during a subsequent docking or communication session with the remote control (10) (column 12, lines 50-54). In addition, Figure 14 also depicts how the docking station connected in a wired manner to the client PC can transfer the remote control data when the remote control is docked within the station.

the 8th step of the remote controller (50) converting the remote control data into data in a required manner through a control unit (52). In particular, *Hayes* further discloses of having an adapter device that attaches to the digital bus interconnecting [various] appliances and which solicits capability information from appliances on the bus for transfer to the remote control (column 10, lines 3-6). The adapter can be either a "stand along" unit or incorporated within some other device (column 10, lines 15-17). In essence, the adapter collects all the capability information of the appliances that are connected and sends the information to the remote controller. For any appliance that is not compatible with the remote controller, additional identity information about the appliance is collected from the centralized device database later; and

the 9th step of the remote controller (50) storing the converted remote control data in a storage unit (53). In particular, *Hayes* further discloses of the remote controller being able to store the identity information within its memory (column 11, line 40).

As to **claim 8**, it is the same method claim corresponding to method claim 5, with the only change being instead of downloading via the client PC and the Internet like in claim 5, now it is downloading via a mobile communication terminal having a remote control function. As such, all of claim 8 is also rejected under the same reasons set forth in connection with the rejection of claim 5.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIANG YU whose telephone number is (571)270-5695. The examiner can normally be reached on Monday - Friday 8:00am - 5:00pm with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick Ferris can be reached on (571)272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/X. Y./
Examiner, Art Unit 4127

/Derrick W Ferris/
Supervisory Patent Examiner, Art Unit 4127